

Video Amplifier, 1 Amplifiers, 120 MHz, 230 V/ $\mu$ s, 0 °C, 70 °C, 32 mA

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	SOIC-8
Product Type	Amplifier ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for AD829JRZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The external compensation pin of the AD829 gives it exceptional versatility. For example, compensation can be selected to optimize the bandwidth for a given load and power supply voltage. As a gain-of-2 line driver, the  $-3$  dB bandwidth can be increased to 95 MHz at the expense of 1 dB of peaking. Its output can also be clamped at its external compensation pin. The AD829 exhibits excellent dc performance. It offers a minimum open-loop gain of 30 V/mV into loads as low as 500  $\Omega$ , a low input voltage noise of 1.7 nV/ $\sqrt{\text{Hz}}$ , and a low input offset voltage of 1 mV maximum. Common-mode rejection and power supply rejection ratios are both 120 dB.

This op amp is also useful in multichannel, high speed data conversion where its fast (90 ns to 0.1%) settling time is important. In such applications, the AD829 serves as an input buffer for 8-bit to 10-bit ADCs and as an output I/V converter for high speed DACs.

Operating as a traditional voltage feedback amplifier, the AD829 provides many of the advantages that a transimpedance amplifier offer. A bandwidth  $>50$  MHz can be maintained for a range of gains through the replacement of the external compensation capacitor. The AD829 and the transimpedance amplifier are both unity-gain stable and provide similar voltage noise performance (1.7 nV/ $\sqrt{\text{Hz}}$ ); however, the current noise of the AD829 (1.5 pA/ $\sqrt{\text{Hz}}$ ) is less than 10% of the noise of transimpedance amplifiers. The inputs of the AD829 are symmetrical.

## Features

High Speed 120 MHz bandwidth,>

Ideal for video applications 0.02% differential gain 0.04° differential phase

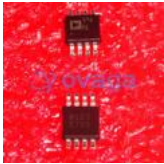
Low noise 1.7 nV/ $\sqrt{\text{Hz}}$  input voltage noise 1.5 pA/ $\sqrt{\text{Hz}}$  input current noise

Excellent dc precision 1 mV maximum input offset voltage (over temperature) 0.3  $\mu\text{V}/^\circ\text{C}$  input offset drift

Flexible operation Specified for  $\pm 5\text{ V}$  to  $\pm 15\text{ V}$  operation  $\pm 3\text{ V}$  output swing into a 150  $\Omega$  load External compensation for gains 1 to 205 mA supply current

Available in tape and reel in accordance with EIA-481A standard

## Related Products



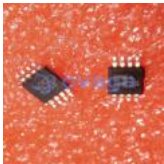
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